

32. (NEW) The torsional electrostatic combdrive of claim 31 where the moving combteeth assembly is positioned entirely above the stationary combteeth assembly by a predetermined vertical displacement during a combdrive resting state.

33. (NEW) The torsional electrostatic combdrive of claim 32 wherein the predetermined vertical displacement is between 0.2 and 3.0 microns.

34. (NEW) The torsional electrostatic combdrive of claim 31 wherein the mirror is formed of single-crystal silicon.

35. (NEW) The torsional electrostatic combdrive of claim 34 wherein the first combteeth are positioned between the second combteeth of the stationary combteeth assembly during a combdrive activation state, and the mirror intersects the plane defined by the first combteeth during the combdrive activation state.

36. (NEW) The torsional electrostatic combdrive of claim 35 wherein the mirror pivots about a torsional hinge during the combdrive activation state.

37. (NEW) The torsional electrostatic combdrive of claim 31 wherein the moving combteeth assembly further includes an anchor, a torsional hinge being positioned between the mirror and the anchor.

38. (NEW) The torsional electrostatic combdrive of claim 31 wherein the moving combteeth assembly has a thickness of between 10 and 500 microns.

39. (NEW) The torsional electrostatic combdrive of claim 38 wherein the moving combteeth assembly has a thickness of between 50 and 100 microns.

40. (NEW) The torsional electrostatic combdrive of claim 31 wherein the mirror has a lateral length of less than 10 millimeters.

Sub  
E2

41.(NEW) The torsional electrostatic combdrive of claim 31 wherein the mirror has a lateral length of between 550 and 2000 microns.

42.(NEW) The torsional electrostatic combdrive of claim 31 wherein the moving combteeth assembly has a comb tooth gap of between 2-30 microns between two of the first individual combteeth.

Sub  
E3

43.(NEW) The torsional electrostatic combdrive of claim 31 wherein the position of the moving combteeth assembly is adjusted in response to a capacitance value measured between the moving combteeth assembly and the stationary combteeth assembly.

44.(NEW) The torsional electrostatic combdrive of claim 31 further comprising transparent substrates enclosing the stationary combteeth assembly and the moving combteeth assembly.

B1

45.(NEW) The torsional electrostatic combdrive of claim 31 wherein the mirror includes a reflective material.

Sub  
E4

46.(NEW) The torsional electrostatic combdrive of claim 31 wherein the mirror includes a multilayer optical filter.

47.(NEW) The torsional electrostatic combdrive of claim 31, wherein the one or more combteeth spines define a plane that is perpendicular to and intersecting the surface of the mirror.

48.(NEW) The torsional electrostatic combdrive of claim 47, wherein the second combteeth are positioned on a first side of the plane.

Sub  
E2

49.(NEW) The torsional electrostatic combdrive of claim 48, wherein the moving combteeth assembly further comprising:

a torsional hinge about which the mirror pivots during a combdrive activation state;  
and

~~B~~ Sub  
C2  
Cont. end

one or more anchors coupled to the torsional hinge, wherein the one or more anchors  
are positioned on a second side of the plane.

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